FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

BIWEEKLY 2000-13

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U.S. Department of Transportation
Federal Aviation Administration
Regulatory Support Division
Airworthiness Programs Branch, AFS-610
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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; + - See AD for additional information.

Biweekly 2000-01

99-27-01		Pratt & Whitney	Engine: JT8D-209, -217, -217A, -217C, and -219
99-27-03		Fokker	F27 Mark 050 Series
99-27-04		Rolls-Royce	Engine: Dart 506, 510, 511, 514, 525, 526, 529, 530, +
99-27-05		Boeing	767-200, -300, and -300F Series
99-27-06		Boeing	757-200, -200PF, and -200CB Series
99-27-07	S 98-25-53	Airbus	A300 B4-600R and A300 F4-600R Series
99-27-08		SAAB	SAAB SF340A and SAAB 340B Series
99-27-09		Airbus	A300 B4-203 Series
99-27-10		Airbus	A310 and A300-600 Series
99-27-11		British Aerospace	BAC 1-11 200 and 400 Series
99-27-13		Fokker	F27 Mark 050 Series
99-27-14	S 99-01-15	Airbus	A340-211, -212-, -213, -311, -312, and -313 Series
99-27-15		General Electric	Engine: GE90-76B, -77B, -85B, -90B, and -92B
99-27-16		CFE	Engine: CFE738-1-1B
2000-01-51	E	Bombardier	CL-600-2B16 (CL-604)

Biweekly 2000-02

98-19-15 R1	R 98-19-15	Fairchild	SA226-T, SA226-T(B), SA226-AT, SA226-TC +
99-26-21		Boeing	737-300, -400, -500, -600, -700, and -800 Series
2000-01-01		Airbus	A300 B2-1A, B2-1C, B2-203, B2K-3C, B4-103, B4-2C +
2000-01-02		Raytheon	BAe.125 Series 1000A and 1000B and Hawker 1000 Series
2000-01-03		SAAB	SAAB 2000 Series
2000-01-04		SAAB	SAAB 2000 Series
2000-01-07		Bombardier	DHC-8-100, -200, and -300 Series
2000-01-08		British Aerospace	ATP
2000-01-09		General Electric	Engine: CJ610 Series and CF700 Series
2000-01-12	S 97-14-11	Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-01-13	S 99-08-12	Pratt & Whitney	Engine: JT9D-7, -7A, -7H, -7AH, -7F, -7J, -20, -20J +
2000-01-14		Boeing	777 Series
2000-01-15		Fokker	F27 Mark 050 Series
2000-01-17		McDonnell Douglas	MD-90 Series
2000-01-18		McDonnell Douglas	DC-8 Series
2000-01-51		Bombardier	CL-604 variant of Canadair Model CL-600-2B16 Series
2000-02-01		McDonnell Douglas	DC-8 Series
2000-02-02		Short Brothers	SD3-60 SHERPA, SD3-SHERPA Series and SD3-30 Series
2000-02-03		Boeing	737-300, -400, and -500 Series
2000-02-04		Airbus	A300 Series, A300-600, and A310 Series
2000-02-13		Bombardier	DHC-8-100, -200, and -300 Series

Biweekly 2000-03

99-26-03	COR	McDonnell Douglas	MD-11 Series
2000-02-05	S 98-24-01	British Aerospace	Jetstream 4101
2000-02-06		Bombardier	DHC-8-100, -200, and -300 Series
2000-02-07		Bombardier	DHC-7-100 Series
2000-02-08		Dornier	328-100 Series
2000-02-10		Boeing	747 Series
2000-02-11		Boeing	777-200 Series
2000-02-15		Raytheon	65-90, 65-A90, B90, and C90
2000-02-17		Rolls-Royce	Engine: RB211 Trent 768-60, 772-60, and 772B-60 Series
2000-02-18	S 97-09-14	Boeing	737-100, -200, -300, -400, and -500 Series
2000-02-19	S 90-02-16	Boeing	727 Series
2000-02-20	S 95-13-12 R1	Boeing	767 Series
2000-02-21		British Aerospace	Jetstream 4101

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Biweekly 2000-03...Cont'd

2000-02-22		Boeing	747-400 Series
2000-02-23		McDonnell Douglas	DC-9-10, -20, -30, -40, and -50 Series and DC-9-81, +
2000-02-24		Airbus	A300, A310, and A300-600 Series
2000-02-33		Boeing	747-400 Series
2000-02-34		Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-02-35		Raytheon	DH.125, HS.125, BH.125 Series 1A, 1B, 3A, 400A, +
2000-02-36	S 98-20-10	Airbus	A319, A320, and A321 Series
2000-02-37		Boeing	747 Series
2000-02-38	S 91-20-07	Airbus	A300, A300-600, and A310 Series
2000-03-01		Boeing	747-100 and -200 Series
2000-03-02		General Electric	Engine: GE90-90B, -85B, and -76B Series
2000-03-03		General Electric	Engine: CF34-3A1 and -3B1 Series

Biweekly 2000-04

99-23-26 R1		General Electric	Engine: CF34-1A, CF34-3A, -3A1, -3A2, and CF34-3B +
2000-02-27		Embraer - Empresa Brasileira	EMB-110P1 and EMB-110P2
2000-02-39		Airbus	A300 Series
2000-03-04		General Electric	Engine: CF6-80C2 Series turbofan
2000-03-05		Boeing	737-200 Series
2000-03-07		Rolls-Royce	Engine: RB211-524H-36 Series turbofan
2000-03-08		McDonnell Douglas	MD-90-30
2000-03-10		McDonnell Douglas	MD-11 Series
2000-03-11		McDonnell Douglas	MD-11 Series
2000-03-12		McDonnell Douglas	MD-11 Series
2000-03-13		McDonnell Douglas	MD-11 Series
2000-03-14		McDonnell Douglas	MD-11 Series
2000-03-15		McDonnell Douglas	MD-11 and MD-11F Series
2000-03-16		McDonnell Douglas	MD-11 Series
2000-03-17	S 97-23-01	Fairchild	SA226 and SA227 Series
2000-03-20		Airbus	A300-600
2000-03-21		Boeing	767
2000-03-22		Boeing	747-100, -200, and 747SP Series
2000-04-02		Boeing	737-100, -200, -300, -400, and -500 Series
2000-04-03		McDonnell Douglas	DC-3 and DC-4 Series
2000-04-04		Fokker	F.28 Mark 0070 and 0100 Series
2000-04-05		Israel	Astra SPX Series
2000-04-06		Airbus	A319, A320, and A321 Series
2000-04-07		British Aerospace	ATP
2000-04-08		Boeing	737-200C Series
2000-04-09		Embraer - Empresa Brasileira	EMB-135 and EMB-145 Series
2000-04-10		Hoffmann	Propeller: HO27( ) and HO4/27 Series
2000-04-11		Airbus	A319, A320, and A321 Series

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Biweekly 2000-05

98-21-21	R1	Bob Fields Aerocessories	Appliance: Electric inflatable door seals
2000-03-51		McDonnell Douglas	DC-9, MD-90-30, 717-200, and MD-88
2000-04-13		Aerospatiale	ATR72 Series
2000-04-14		General Electric	Engine: CF6-80C2 A1/A2/A3/A5/A8/A5F/B1/B2/B4/B6 +
2000-04-17		Boeing	747-100, -200, and -300 Series
2000-04-18		Boeing	757 Series
2000-04-19		Dassault	Mystere-Falcon 50 Series
2000-04-22		Rolls-Royce	Engine: RB211-524G2-T-19, RB211-524G3-T-19, +
2000-04-23		Dornier	328-100 Series and 328-300 Series
2000-05-09		Boeing	757-200, -200PF, and –200CB Series
2000-05-10		General Electric	Engine: GE90-85B Series turbofan

Biweekly 2000-06

2000-03-03	COR	General Electric	Engine: CF34-3A1 and -3B1 Series turbofan
2000-04-24		Honeywell International	Appliance: 36-300(A), 36-280(B), and 36-280(D) Series
2000-05-01		McDonnell Douglas	MD-11 Series
2000-05-02		Fokker	F27 Mark 050, 200, 500, and 600 Series
2000-05-04		Airbus	A330 and A340 Series
2000-05-05		Construcciones Aeronauticas	CN-235-100 and CN-235-200 Series
2000-05-07		Airbus	A300 and A300-600 Series
2000-05-08		Airbus	A319 and A321 Series
2000-05-14	S 80-22-53	AlliedSignal	Engine: ALF502 and LF507 Series turbofan
2000-05-18		Airbus	A300, A310, and A300-600 Series
2000-05-19		Boeing	727 Series
2000-05-20		Dassault	Fan Jet Falcon, Mystere-Falcon 20, 50, 00, and 900 Series +
2000-05-21		Airbus	A319, A320, A321, A330, and A340 Series
2000-05-24		Honeywell International	Appliance: KAP 140 or KFC 225 autopilot system
2000-05-25	S 96-14-09	British Aerospace	BAe 146-100A, and -300 Series
2000-05-26	S 93-18-04	Aerospatiale	ATR42-200, ATR42-300, and ATR42-320 Series
2000-05-27	S 98-21-06	British Aerospace	BAe 146-100A, -200A, and -300A Series
2000-05-28		British Aerospace	BAe 146 and Avro 146-RJ Series
2000-05-29		Boeing	737-100, -200, -300, -400, and -500 Series
2000-05-30		Boeing	747-100, -100B, -100B SUD, -200B, -200C, -200F, -300 +
2000-06-02		Dornier	228-100, 228-101, 228-200, 228-201, 228-202, +
2000-06-04		Fairchild	SA226-T, SA226-AT, SA226-T(B), SA227-AT, +

Biweekly 2000-07

2000-05-22		CFM International	Engine: CFM56-2, -2A, -2B, -3, -3B, and -3C Series
2000-06-08	S 98-01-15	Airbus	A330-301, -321, -322, -341, -342, A340-211, -212, -213 +
2000-06-13	S 98-25-06	Boeing	737-200, -200C, -300, -400 Series
2000-07-01	S 98-13-34	Embraer-Empresa Brasileira	EMB-145 Series
2000-07-02		McDonnell Douglas	MD-11 Series
2000-07-51	E	McDonnell Douglas	717-200 Series

Biweekly 2000-08

2000-01-05	S 99-18-03	Boeing	747-100B, -200, -300, and SP Series
2000-05-03		Airbus	A300-600 and A310 Series
2000-05-12		Rolls-Royce	Engine: RB211-524G2-19, RB211-524G3-19, +
2000-05-13		Boeing	737-100, -200, -300, -400, and -500 Series
99-13-08 R1		Lockheed	L-1011-385 Series
99-23-22 R2	Recission	Transport Category Airplanes	Appliance: Mode “C” Transponder
2000-07-05	S 99-07-06	Boeing	767 Series

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Biweekly 2000-08...Cont'd

2000-07-06		Boeing	737-100, -200, -200C, -300, -400, and -500 Series
2000-07-07		Airbus	A300 Series
2000-07-08		Boeing	777 Series
2000-07-10		Boeing	747-200B, -300, -400, -400D, -400F Series
2000-07-11		Industrie Aero. Mec.	Piaggio P-180
2000-07-13		Boeing	757-200, -200PF Series
2000-07-14		McDonnell Douglas	MD-11 Series
2000-07-15		McDonnell Douglas	MD-11 Series
2000-07-16	S 94-11-06	McDonnell Douglas	MD-11 and MD-11F Series
2000-07-18		McDonnell Douglas	MD-11 and MDj-11F Series
2000-07-20		McDonnell Douglas	MD-11 Series
2000-07-21		McDonnell Douglas	MD-11 Series
2000-07-22		Airbus	A300-600 Series
2000-07-23		Bombardier	DHC-8-100 Series
2000-07-24		Fokker	F.28 Mark 0070 and 0100
2000-07-25		Gulfstream Aerospace	G-IV Series
2000-07-27		Transport Category Airplanes	Appliance: Honeywell Air Data Inertial Reference Unit
2000-07-28	S 99-18-22	Fokker	F27 Series
2000-07-29	S 98-16-09	Airbus	A300, A310, and A300-600 Series
2000-08-01		Rolls-Royce	Engine: Tay 650-15 Series Turbofan
2000-08-03	S 2000-05-01	McDonnell Douglas	MD-11 Series

Biweekly 2000-09

95-19-04 R1	Rescission	Learjet	35, 35A, 36, 36A, 55, 55B, and 55C
99-27-14	COR S 99-01-15	Airbus industrie	A340-211, -212, -213, -311, -312, and –313 Series
2000-05-06		Raytheon Aircraft Company	400A series and 400T Series
2000-07-04		Dornier Luftfahrt GMBH	328-100 series
2000-07-09		Boeing	737-600, -700, and –800 series
2000-07-12		Boeing	727-100, -100C, and –200 Series
2000-07-17		McDonnell Douglas	MD-11 Series
2000-07-19		McDonnell Douglas	MD-11 Series
2000-07-26		Airbus Industrie	A300 Series
2000-07-51		McDonnell Douglas	717-200 Series
2000-08-07	S 96-24-16	Raytheon Aircraft Co	BAe 125-800A and BAe 125-800B, Hawker 800, +
2000-08-08		Boeing	737-600, -700, and –800 Series
2000-08-10	S 99-08-17	General Electric Company	Engine: GE90-76B/ -77B/ -85B/ -90B/ -92B Series
2000-08-11	S 99-08-18	General Electric Company	Engine: CF6-6, CF6-45, and CF6-50 Series
2000-08-12	S 99-08-13	General Electric Company	Engine: CF6-80A, CF6-80C2, and CF6-80E1 Series
2000-08-13		Learjet	45
2000-08-14		Boeing	747 Series
2000-08-15		Boeing	777 Series
2000-08-17		Boeing	737-100, -200, -300, -400, and –500 Series
2000-08-19		Boeing	727 and 727C series
2000-08-20		Lockheed	L-1011-385-1, -1-14, -1-15, and –3 Series
2000-08-21		Boeing	747 Series
2000-09-01	S 93-20-02	McDonnell Douglas	DC-8 Series
2000-09-02		McDonnell Douglas	DC-8 Series
2000-09-03	S 2000-02-33	Boeing	747-400 Series
2000-09-04	S 2000-02-20	Boeing	767 Series
2000-09-05		Allison Engine Company	Engine: AE 3007A, AE 3007A1, AE 3007A1/1, +

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Biweekly 2000-10

2000-08-18		McDonnell Douglas	DC-9 series, MD-88, MD-90-30
2000-09-07		McDonnell Douglas	DC-10-10, -15, -30, -30F, and -40 Series, +
2000-09-08		Boeing	747-100, -200, 747SP, and 747SR Series
2000-09-09	S 99-01-12	Embraer - Empresa Brasileira	EMB-145
2000-09-10		Airbus Industrie	A300-600 Series
2000-09-11		Fokker Services BV	F.28 Mark 0070
2000-09-12		Raytheon Aircraft Company	400A series, 400T (T-1A) Series, 400T (TX) Series
2000-09-13		British Aerospace	Jetstream 3201
2000-09-14		Rolls-Royce	Engine: RB211-535 Series
2000-10-02		Airbus	All A319, A320, A321, A330, and A340 Series
2000-10-03		McDonnell Douglas	DC-10 Series
2000-10-51	E	Boeing	767 Series

Biweekly 2000-11

2000-04-05	C	Israel Aircraft Industries	Astra SPX Series
2000-10-01	S 96-08-08	Airbus Industrie	A300 B2, A300 B2K, A300 B2-200, A300 B4-2C, +
2000-10-04		Israel Aircraft Industries	1124 and 1124A Westwind
2000-10-11		Gulfstream Aerospace	G-159 Series
2000-10-12		Boeing	747-400 Series
2000-10-15	S 93-08-15	Airbus Industire	A320 Series
2000-10-16	S 98-14-11	Airbus Industrie	A319, A320, and A321 Series
2000-10-17		Boeing	747 Series
2000-10-18	S 96-11-05	Airbus Industrie	A300, A300-600, and A310 Series
2000-10-19		Israel Aircraft Industries	1125 Westwind Astra and Astra SPX Series
2000-10-21		Boeing	737-300, -400, and –500 Series
2000-10-23	S 97-26-21	Boeing	747-100, 747-200, 747-300, 747SR, and 747SP Series
2000-11-01		McDonnell Douglas	DC-9-81 (MD-81), DC-9-82 (MD-82), +
2000-11-02		McDonnell Douglas	DC-10-10F, DC-10-15, DC-10-30, DC-10-30F, +

Biweekly 2000-12

2000-10-20		Lockheed	L-1011-385 Series
2000-10-51		Boeing	767 Series
2000-11-03		Dassault Aviation	Falcon 2000, Mystere-Falcon 900, Falcon 900EX, +
2000-11-06		Boeing	767 Series
2000-11-07	S 97-05-01	Boeing	747-200, -300, and –400 Series
2000-11-08	S 98-08-23	Boeing	747 and 767 Series
2000-11-09		Airbus	A319, A320, and A321 Series
2000-11-10	S 94-18-03	Rolls-Royce	Engine: RB211-22B and –524 Series
2000-11-11		Boeing	777-200 Series
2000-11-12		General Electric Company	Engine: CF6-45/50 Series
2000-11-13		Fokker Services	F.28 Mark 1000, 2000, 3000, and 4000 Series
2000-11-15		AlliedSignal (Honeywell)	Engine: ALF502R and LF507 Series
2000-11-19		Boeing	767-200 and –300 Series
2000-11-20		Bombardier Inc.	DHC-8-100 and –300 Series
2000-11-21		Airbus Industrie	A319, A320, and A321 Series
2000-11-22		Allison Engine	Engine: AE 3007A, AE3007A1/1, AE 3007A1/2, +
2000-11-23		Airbus Industrie	A300, A310, and A300-600 Series
2000-11-24		British Aerospace Regional	ATP
2000-11-25		Airbus Industrie	A320-232 and –233 Series
2000-11-26		Airbus Industrie	A330 and A340 Series
2000-11-27		Airbus Industrie	A319, A320, and A321 Series
2000-11-28		Boeing	747-400 , 767-200 and –300 Series
2000-11-29		Fokker Services	F27 Mark 050, 100, 200, 300, 400, 500, 600, +

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Biweekly 2000-12...Cont'd

2000-12-01	S 99-08-16	CFM International	Engine: CFM56-2, -2A, -2B, -3, -3B, -3C, -5, -5B, +
2000-12-02	S 99-08-15	Pratt & Whitney	Engine: PW4050, PW4052, PW4056, PW4060, +
2000-12-04	S 97-11-01	Airbus Industrie	A319, A320, and A321 Series
2000-12-05	S 99-08-11	International Aero Engines	Engine: AG (IAE) V2500-A1/-A5/-D5 Series
2000-12-06		Airbus Industrie	A330 and A340 Series
2000-12-07		Saab Aircraft	SAAB SF340A, and SAAB 340B Series
2000-12-15		Dassault Aviation	Falcon 2000, Mystere-Falcon 900, Falcon 900EX, +

Biweekly 2000-13

95-26-03	S 95-15-51	Pratt & Whitney	Engine: JT8D-1, -1A, -1B, -7, -7A, -7B, -9, -9A, -11, -15, +
2000-12-08		General Electric Company	Engine: CF6-80C2A1/A2/A3/A5/A5F/A8/D1F
2000-12-11	S 95-07-05	Airbus Industrie	A300-600 Series
2000-12-12	S 95-10-03	Airbus Industrie	A300, A300-600, A310 Series
2000-12-13	S 97-21-10	Airbus Industrie	A319, A320, and A321 Series
2000-12-14		SAAB Aircraft	SF340A and 340B Series
2000-12-16	S 99-05-06	Boeing	747 Series
2000-12-17		Boeing	767 Series
2000-12-18		Rolls Royce	Engine: Dart 511, 511-7E, 514-7, 528, 528-7E, 529-7E, +
2000-12-19		Boeing	747 Series
2000-12-20		Airbus Industrie	A310 Series
2000-12-21		Boeing	747-400 Series
2000-13-02		Embraer-Empresa Brasileira	EMB-135 and EMB-145 Series
2000-13-03		McDonnell Douglas	DC-8 Series
2000-13-04	S 99-25-13 C1	Boeing	777-200 and –300 Series

PRATT & WHITNEY
AIRWORTHINESS DIRECTIVES
ENGINE
LARGE AIRCRAFT

Note: This copy is reprinted to correct the effective date of the AD published in Book 3 of the AD Summary.

95-26-03 Pratt & Whitney: Amendment 39-9461. Docket 95-ANE-58. Supersedes AD 95-15-51, Amendment 39-9345.

Applicability: Pratt & Whitney (PW) Models JT8D-1, -1A, -1B, -7, -7A, -7B, -9, -9A, -11, -15, -15A, -17, -17A, -17R, -17AR engines with serial numbers specified in Section 2 of PW Alert Service Bulletin (ASB) No. A6226, dated October 17, 1995. These engines are installed on but not limited to Boeing B727 and B737, and McDonnell Douglas DC-9 aircraft.

NOTE: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (c) to request approval from the Federal Aviation Administration (FAA). This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any engine from the applicability of this AD.

Compliance: Required as indicated, unless accomplished previously.

To prevent an uncontained high pressure compressor (HPC) disk failure, which can result in damage to the aircraft, accomplish the following:

(a) Perform a records search, inspect if necessary, repair or replace if necessary, and report results, of stage 7 through 12 HPC disks in accordance with the intervals and procedures of paragraph 2.A through 2.D of PW ASB No. A6226, dated October 17, 1995. Reporting requirements have been approved by the Office of Management and Budget and assigned OMB control number 2120-0056.

(b) For the purpose of this AD, the accomplishment effective date to be used for determination of inspection intervals, as required by Section 2.B of PW ASB A6226, dated October 17, 1995, is defined as the effective date of this AD.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

NOTE: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Engine Certification Office.

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

(e) The actions required by this AD shall be done in accordance with the following service document:

Document No.	Pages	Revision	Date
PW ASB No. A6626	1-20	Original	October 17, 1995

Total pages: 20.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Pratt & Whitney, Publications Department, M/S 132-30, 400 Main St., East Hartford, CT 06108. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on January 11, 1996.

FOR FURTHER INFORMATION CONTACT: Mark A. Rumizen, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (617) 238-7137, fax (617) 238-7199.

BW 2000-13

GENERAL ELECTRIC COMPANY
AIRWORTHINESS DIRECTIVES
ENGINE
LARGE AIRCRAFT

2000-12-08 General Electric Company: Amendment 39-11786. Docket 99-NE-45-AD.
Applicability: General Electric Company (GE) Models CF6-80C2A1/A2/A3/A5/A5F/A8/D1F turbofan engines, with left hand aft engine mount link assemblies, part numbers (P/Ns) 9348M79G01 or 9348M79G02 installed, or right hand aft engine mount link assemblies, P/Ns 9348M84G01 or 9348M84G02 installed. These engines are installed on but not limited to Airbus Industrie A300 and A310 series, and McDonnell Douglas MD-11 series aircraft.

Note 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent aft engine mount link failure, which can result in adverse redistribution of the aft engine mount loads and possible aft engine mount system failure, accomplish the following:

Initial Inspection

(a) Visually inspect aft engine mount link assemblies for separations, cracks, and spherical bearing race migration, as follows:

Not Previously Inspected

(1) Within 400 cycles-in-service (CIS) after the effective date of this AD, if not previously inspected using GE CF6-80C2 Alert Service Bulletin (ASB) 72-A0964, Revision 2, dated January 24, 2000, Revision 1, dated November 12, 1999, or Original, dated April 16, 1999, OR

Previously Inspected

(2) Within 400 cycles-since-last-inspection (CSLI), if previously inspected using GE CF6-80C2 Alert Service Bulletin (ASB) 72-A0964, Revision 2, dated January 24, 2000, Revision 1, dated November 12, 1999, or Original, dated April 16, 1999,

(3) Inspect in accordance with the Accomplishment Instructions of GE CF6-80C2 ASB 72-A0964, Revision 2, dated January 24, 2000.

Cracked or Separated Parts

(4) If a crack or separation is discovered, prior to further flight:

(i) Remove the cracked or separated aft engine mount link assembly and the attaching hardware from service; AND

(ii) Replace with serviceable parts.

Removal of Aft Engine Mount Link Assemblies with Spherical Bearing Race Migration

(5) If an aft engine mount link assembly is found with spherical bearing race migration, but no cracks or separations, prior to further flight, EITHER:

(i) Remove the aft engine mount link assembly and the attaching hardware from service and replace with serviceable parts; OR

Additional Borescope Inspection of Aft Engine Mount Link Assemblies with Spherical Bearing Race Migration

(ii) Perform an additional borescope inspection for cracks in accordance with paragraph (3)(I) of the Accomplishment Instructions of GE CF6-80C2 ASB 72-A0964, Revision 2, dated January 24, 2000.

After Additional Borescope Inspection, If Parts Are Cracked

(6) If a crack indication is discovered, prior to further flight, remove the cracked aft engine mount link assembly and the attaching hardware from service, and replace with serviceable parts.

After Additional Borescope Inspection, If Parts Are Not Cracked (Grace Period)

(7) If crack indications are not discovered, within 75 CIS after the inspection performed in accordance with paragraph (a)(5)(ii) of this AD, remove the aft engine mount link assembly from service, and replace with serviceable parts.

Attaching Hardware

(8) Attaching hardware may be returned to service after inspection in accordance with paragraph 3(I)(1)(d) or 3(I)(2)(d) of GE CF6-80C2 ASB 72-A0964, Revision 2, dated January 24, 2000, as applicable, only if visual inspection of the removed link shows no cracks or separations.

Note 2: Link attaching hardware includes the nuts, bolts and washers that secure the link.

Repetitive Inspections

(b) Thereafter, perform the actions required by paragraph (a) and associated subparagraphs at intervals not to exceed 400 CSLI.

Replacement with Improved Link Assemblies

(c) Replace aft engine mount link assemblies with improved aft engine mount link assemblies at the next engine shop visit (ESV), or before accumulating 29,000 engine cycles since new (CSN), whichever occurs first.

(1) Replace in accordance with the Accomplishment Instructions of CF6-80C2 ASB 72-A0989, dated January 19, 2000.

Left Hand Aft Engine Mount Link Assemblies

(2) Replace left-hand aft engine mount link assemblies, P/Ns 9348M79G01 or 9348M79G02, with improved left-hand aft engine mount link assemblies, P/N 1846M23G01.

Right Hand Aft Engine Mount Link Assemblies

(3) Replace right hand aft engine mount link assemblies, P/Ns 9348M84G01 or 9348M84G02, with improved right hand aft engine mount link assemblies, P/N 9348M84G03.

Terminating Action

(d) Installation of improved aft engine mount link assemblies in accordance with paragraph (c) and its subparagraphs constitutes terminating action to the inspections required by paragraphs (a) and (b) of this AD.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

Note 3: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Engine Certification Office.

Ferry Flights

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the inspection requirements of this AD can be accomplished.

Incorporation By Reference

(g) The inspection shall be done in accordance with the following GE Alert Service Bulletins: (ASBs) CF6-80C2 72-A0964, Revision 2, dated January 24, 2000; Revision 1, dated November 12, 1999; Original, dated April 16, 1999 and CF6-80C2 72-A0989, dated January 19, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from General Electric Company via Lockheed Martin Technology Services, 10525 Chester Road, Suite C, Cincinnati, Ohio 45215, telephone (513) 672-8400, fax (513) 672-8422. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

Effective Date

(h) This amendment becomes effective on August 28, 2000.

FOR FURTHER INFORMATION CONTACT: Karen Curtis, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7192, fax (781) 238-7199.

Issued in Burlington, Massachusetts, on June 8, 2000.
David A. Downey, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service

BW 2000-13

AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-11 AIRBUS INDUSTRIE: Amendment 39-11789. Docket 98-NM-164-AD. Supersedes AD 95-07-05, Amendment 39-9187.

Applicability: Model A300-600 series airplanes, certificated in any category, on which Airbus Modification 10161 has not been installed in production.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracks in the bolt holes of the wing spars, which could result in reduced structural integrity of a wing spar, accomplish the following:

Ultrasonic Inspections

(a) Perform an ultrasonic inspection to detect fatigue cracking of the bolt holes inboard and outboard of rib 9 on the bottom booms of the front and rear wing spars, in accordance with Airbus Service Bulletin A300-57-6037, dated August 1, 1994, or Revision 1, dated August 31, 1995, at the applicable time specified in paragraph (a)(1) or (a)(2) of this AD. Repeat the inspection thereafter at intervals not to exceed 4,800 flight cycles or 11,000 flight hours, whichever occurs first.

(1) For airplanes on which Airbus Modification 8842 (reference Airbus Service Bulletin A300-57-6039) has not been installed: Inspect at the earlier of the times specified by paragraphs (a)(1)(i) and (a)(1)(ii) of this AD.

(i) Prior to the accumulation of 17,000 total flight cycles, or within 2,000 flight cycles after May 10, 1995 (the effective date of AD 95-07-05, amendment 39-9187), whichever occurs later.

(ii) Prior to the accumulation of 39,000 total flight hours.

(2) For airplanes on which Airbus Modification 8842 has been installed: Inspect at the earlier of the times specified by paragraphs (a)(2)(i) and (a)(2)(ii) of this AD.

(i) Within 17,000 flight cycles after accomplishment of Airbus Modification 8842, or within 2,000 flight cycles after May 10, 1995, whichever occurs later.

(ii) Within 39,000 flight hours after accomplishment of Airbus Modification 8842.

Corrective Action

(b) If any crack is found, prior to further flight, repair in accordance with Airbus Service Bulletin A300-57-6037, dated August 1, 1994, or Revision 1, dated August 31, 1995. Thereafter, perform the repetitive inspections required by paragraph (a) of this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with Airbus Service Bulletin A300-57-6037, dated August 1, 1994; or Airbus Service Bulletin A300-57-6037, Revision 1, dated August 31, 1995, as applicable. Airbus Service Bulletin A300-57-6037, Revision 1, dated August 31, 1995, contains the following list of effective pages:

Page Number	Revision Level Shown on Page	Date Shown on Page
1, 2, 4-6	1	August 31, 1995
3, 7-17	Original	August 1, 1994

(1) The incorporation by reference of Airbus Service Bulletin A300-57-6037, Revision 1, dated August 31, 1995, is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Airbus Service Bulletin A300-57-6037, dated August 1, 1994, was approved previously by the Director of the Federal as of May 10, 1995 (60 FR 17990, April 10, 1995).

(3) Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in French airworthiness directive 94-208-169(B)R2, dated October 8, 1997.

(f) This amendment becomes effective on July 24, 2000.

FOR FURTHER INFORMATION CONTACT:
Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on June 9, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-12 AIRBUS INDUSTRIE: Amendment 39-11790. Docket 99-NM-240-AD. Supersedes AD 95-10-03, Amendment 39-9220.

Applicability: The following airplanes, certificated in any category:

- Model A300 series airplanes, as listed in Airbus Service Bulletin A300-54-071, Revision 1, dated October 15, 1993.
- Model A300-600 series airplanes, as listed in Airbus Service Bulletin A300-54-6011, Revision 1, dated October 15, 1993.
- Model A310 series airplanes, as listed in Airbus Service Bulletin A310-54-2016, Revision 02, dated June 11, 1999.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking, which could result in reduced structural integrity of the lower spar of the pylon, accomplish the following:

RESTATEMENT OF CERTAIN REQUIREMENTS OF AD 95-10-03:

Model A300 Series Airplanes

(a) For Model A300 B4-2C, B2K-3C, B2-203, B4-103, and B4-203 series airplanes: Prior to the accumulation of 9,000 total landings, or within 500 landings after June 12, 1995 (the effective date of AD 95-10-03, amendment 39-9220), whichever occurs later, perform an internal eddy current inspection to detect cracks in the lower spar axis of the pylon between ribs 9 and 10, in accordance with Airbus Industrie Service Bulletin A300-54-071, dated November 12, 1991; or Revision 1, dated October 15, 1993.

(1) If no crack is found, repeat the inspection thereafter at intervals not to exceed 2,500 landings.

(2) If any crack is found that is less than or equal to 30 mm: Perform subsequent inspections and repair in accordance with the methods and times specified in the service bulletin.

(3) If any crack is found that is greater than 30 mm, but less than 100 mm: Prior to the accumulation of 250 landings after crack discovery, repair in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate; or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent).

(4) If any crack is found that is greater than or equal to 100 mm: Prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

(5) Accomplishment of the modification specified in Airbus Industrie Service Bulletin A300-54-0079, dated October 15, 1993, constitutes terminating action for the inspections required by paragraph (a) of this AD.

Model A300-600 Series Airplanes

(b) For Model A300-600 B4-620, C4-620, B4-622R, and B4-622 series airplanes: Except as provided by paragraph (b)(5) of this AD, prior to the accumulation of 4,000 total landings, or within 500 landings after June 12, 1995 (the effective date of AD 95-10-03), whichever occurs later, perform an internal eddy current inspection to detect cracks in the lower spar axis of the pylon between ribs 9 and 10, in accordance with Airbus Industrie Service Bulletin A300-54-6011, dated November 12, 1991, as amended by Service Bulletin Change Notice O.A., dated July 10, 1992; or Revision 1, dated October 15, 1993.

(1) If no crack is found, repeat the inspection thereafter at intervals not to exceed 2,500 landings.

(2) If any crack is found that is less than or equal to 30 mm: Perform subsequent inspections and repair in accordance with the methods and times specified in the service bulletin.

(3) If any crack is found that is greater than 30 mm, but less than 100 mm: Prior to the accumulation of 250 landings after crack discovery, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent).

(4) If any crack is found that is greater than or equal to 100 mm: Prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

(5) Accomplishment of the modification specified in Airbus Industrie Service Bulletin A300-54-6019, dated October 15, 1993, increases the threshold and repetitive interval of the inspections required by paragraph (b) of this AD to the threshold and interval specified in paragraph 2.D. of the Accomplishment Instructions of Airbus Industrie Service Bulletin A300-54-6011, Revision 1, dated October 15, 1993.

NEW REQUIREMENTS OF THIS AD:

Model A310 Series Airplanes

(c) For Model A310-221, -222, -322, -324, and -325 series airplanes: Perform an internal eddy current inspection to detect cracks in the lower spar axis of the pylon between ribs 9 and 10, in accordance with Airbus Industrie Service Bulletin A310-54-2016, dated November 12, 1991; or Revision 1, dated October 15, 1993; or Revision 02, dated June 11, 1999; at the time specified in paragraph (d) of this AD.

(1) If no crack is found, repeat the inspection thereafter at intervals not to exceed 2,500 landings.

(2) If any crack is found that is less than or equal to 30 mm: Perform subsequent inspections and repair in accordance with the methods and times specified in the service bulletin.

(3) If any crack is found that is greater than 30 mm, but less than 100 mm: Prior to the accumulation of 250 landings after crack discovery, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

(4) If any crack is found that is greater than or equal to 100 mm: Prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

(5) Accomplishment of the modification specified in Airbus Industrie Service Bulletin A310-54-2022, dated October 15, 1993; or Revision 01, dated March 16, 1999; increases the threshold and repetitive interval of the inspections required by paragraph (c) of this AD to the threshold and interval specified in paragraph 2.D. of the Accomplishment Instructions of Airbus Industrie Service Bulletin A310-54-2016, Revision 02, dated June 11, 1999.

(d) Perform the initial inspection required by paragraph (c) of this AD at the earlier of the times specified by paragraphs (d)(1) and (d)(2) of this AD.

(1) Prior to the accumulation of 25,000 total landings, or within 500 landings after June 12, 1995, whichever occurs later.

(2) At the applicable time specified by paragraph (d)(2)(i), (d)(2)(ii), or (d)(2)(iii) of this AD.

(i) For airplanes that have accumulated fewer than 10,000 landings as of the effective date of this AD: Perform the inspection prior to the accumulation of 3,800 total landings, or within 1,500 landings after the effective date of this AD, whichever occurs later.

(ii) For airplanes that have accumulated 10,000 total landings or more, but fewer than 20,000 total landings, as of the effective date of this AD: Perform the inspection within 1,000 landings after the effective date of this AD.

(iii) For airplanes that have accumulated 20,000 total landings or more as of the effective date of this AD: Perform the inspection within 500 landings after the effective date of this AD.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(g) Except as provided by paragraphs (a)(3), (a)(4), (b)(3), (b)(4), (c)(3), and (c)(4) of this AD, the actions shall be done in accordance with the following Airbus Industrie service bulletins, as applicable.

Airbus Industrie Service Bulletin Number	**Revision Level**	**Service Bulletin Date**
A300-54-071	Original	November 12, 1991
A300-54-071	1	October 15, 1993
A300-54-0079	Original	October 15, 1993
A300-54-6011	Original	November 12, 1991
Change Notice O.A. A300-54-6011	Original	July 10, 1992
A300-54-6011	1	October 15, 1993
A300-54-6019	Original	October 15, 1993
A310-54-2016	Original	November 12, 1991
A310-54-2016	1	October 15, 1993
A310-54-2022	Original	October 15, 1993
A310-54-2022	01	March 16, 1999
A310-54-2016	02	June 11, 1999

(1) The incorporation by reference of Airbus Industrie Service Bulletin A310-54-2016, Revision 02, dated June 11, 1999; and A310-54-2022, Revision 01, dated March 16, 1999, is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of the remaining Airbus Industrie publications was approved previously by the Director of the Federal Register as of June 12, 1995 (60 FR 25604, May 12, 1995).

(3) Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in French airworthiness directive 1999-237-285(B), dated June 2, 1999.

(h) This amendment becomes effective on July 28, 2000.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on June 9, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-13 AIRBUS INDUSTRIE: Amendment 39-11791. Docket 99-NM-351-AD. Supersedes AD 97-21-10, Amendment 39-10163.

Applicability: Model A319, A320, and A321 series airplanes; certificated in any category; on which any of the Airbus modifications has been installed or any of the Airbus service bulletins has been accomplished, as listed in the following table; except those airplanes on which Airbus Modification 26716, 26799, 26968, or 27831 has been installed; or except those airplanes on which Airbus Service Bulletin A320-22-1063, A320-22-1064, A320-22-1065, A320-22-1067, A320-22-1068, or A320-22-1069 has been accomplished:

Affected Model(s)	**Airbus Modification Installed**
A319 and A321	25469 (reference Airbus Service Bulletin A320-22-1054)
A319, A320, and A321	26093
A320	24065 (reference Airbus Service Bulletin A320-22-1040) or 24067 (reference Airbus Service Bulletin A320-22-1039)
A320	25314 (reference Airbus Service Bulletin A320-22-1051) or 25315 (reference Airbus Service Bulletin A320-22-1050)
A320 and A321	24064 (reference Airbus Service Bulletin A320-22-1034) or 24066 (reference Airbus Service Bulletin A320-22-1029)
A320 and A321	25199 (reference Airbus Service Bulletin A320-22-1045) or 25200 (reference Airbus Service Bulletin A320-22-1046)
A320 and A321	25240 (reference Airbus Service Bulletin A320-22-1033) or 25274 (reference Airbus Service Bulletin A320-22-1056)
A319, A320, and A321	26243
A319 and A320	26717

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent erroneous navigational calculations, which could result in an increased risk of collision with terrain or other airplanes, accomplish the following:

RESTATEMENT OF REQUIREMENTS OF AD 97-21-10

(a) Within 10 days after November 3, 1997 (the effective date of AD 97-21-10, amendment 39-10163), revise the Normal Procedures Section of the FAA-approved Airplane Flight Manual (AFM) by inserting a copy of Model A319/320/321 Flight Manual Temporary Revision 4.03.00/02, dated May 28, 1997, into the AFM.

NOTE 2: When the temporary revision specified in paragraph (a) of this AD has been incorporated into the general revisions of the AFM, the general revisions may be inserted in the AFM, provided the information contained in the general revisions is identical to that specified in Model A319/320/321 Flight Manual Temporary Revision 4.03.00/02.

NEW REQUIREMENTS OF THIS AD

(b) Within 18 months after the effective date of this AD, accomplish either paragraph (b)(1) or (b)(2) of this AD, in accordance with Airbus Service Bulletin A320-22-1063, Revision 01, dated October 8, 1999; A320-22-1064, dated September 15, 1998; A320-22-1065, dated October 28, 1998; A320-22-1067, Revision 01, dated July 7, 1999; A320-22-1068, dated December 9, 1998; or A320-22-1069, dated February 1, 1999; as applicable. Following accomplishment of either paragraph (b)(1) or (b)(2) of this AD, the AFM revision required by paragraph (a) of this AD may be removed from the AFM.

(1) Modify all existing on-board replaceable modules of the flight management guidance computers (FMGC) to incorporate software changes in accordance with the Accomplishment Instructions of the applicable service bulletin.

(2) Replace all existing FMGC's with new, improved FMGC's in accordance with the Accomplishment Instructions of the applicable service bulletin.

(c) Accomplishment of either the modification or replacement action required by paragraph (b) of this AD constitutes terminating action for the AFM requirements of paragraph (a) of AD 98-19-08, amendment 39-10750. Following accomplishment of either of those actions, remove the FAA-approved AFM revision required by that AD (Airbus A319/320/321 Airplane Flight Manual Temporary Revision 9.99.99/44, Issue 2, dated March 3, 1998).

Spares

(d) As of the effective date of this AD, no person shall install any FMGC part number B546BAM0205, B546CAM0101, B546BCM0204, B398BAM0207, B398AAM0410, B546CCM0101, B546CCM0102, B546CCM0103, or B398BCM0107; unless it has been modified in accordance with this AD.

Alternative Methods of Compliance

(e) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

(2) Alternative methods of compliance, approved previously in accordance with AD 97-21-10, amendment 39-10163, are approved as alternative methods of compliance with paragraph (a) of this AD.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(g) The actions shall be done in accordance with Model A319/320/321 Flight Manual Temporary Revision 4.03.00/02, dated May 28, 1997; Airbus Service Bulletin A320-22-1063, Revision 01, dated October 8, 1999; Airbus Service Bulletin A320-22-1064, dated September 15, 1998; Airbus Service Bulletin A320-22-1065, dated October 28, 1998; Airbus Service Bulletin A320-22-1067, Revision 01, dated July 7, 1999; Airbus Service Bulletin A320-22-1068, dated December 9, 1998; and Airbus Service Bulletin A320-22-1069, dated February 1, 1999; as applicable.

(1) The incorporation by reference of Airbus Service Bulletin A320-22-1063, Revision 01, dated October 8, 1999; Airbus Service Bulletin A320-22-1064, dated September 15, 1998; Airbus Service Bulletin A320-22-1065, dated October 28, 1998; Airbus Service Bulletin A320-22-1067, Revision 01, dated July 7, 1999; Airbus Service Bulletin A320-22-1068, dated December 9, 1998; and Airbus Service Bulletin A320-22-1069, dated February 1, 1999; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Model A319/320/321 Flight Manual Temporary Revision 4.03.00/02, dated May 28, 1997, was approved previously by the Director of the Federal Register as of November 3, 1997 (62 FR 53939, October 17, 1997).

(3) Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in French airworthiness directive 1999-411-140(B), dated October 20, 1999, and Revision 1, dated May 3, 2000.

(h) This amendment becomes effective on July 24, 2000.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on June 9, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

SAAB AIRCRAFT AB
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-14 SAAB AIRCRAFT AB: Amendment 39-11792. Docket 2000-NM-25-AD.

Applicability: Model SAAB SF340A, serial numbers -004 through -159 inclusive; and SAAB 340B series airplanes, serial numbers -160 through -459 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent false warning of a hot engine exhaust tailpipe and intermittent signal failure, the consequent execution of unnecessary procedures by the flightcrew, accomplish the following:

(a) Prior to the accumulation of 14,000 total flight hours, or within 4,000 flight hours after the effective date of this AD, whichever occurs later: Perform a detailed visual inspection to detect chafing of the wires and harnesses in the cabin compartment ceiling, and install protective sleeving on all of the harnesses routed in the inspection area; in accordance with Saab Service Bulletin 340-92-027, dated December 10, 1999. Except as provided by paragraph (b) of this AD, prior to further flight, repair any chafing in accordance with the service bulletin.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(b) For any chafing detected during the inspection required by paragraph (a) of this AD for which the service bulletin specifies to contact Saab for appropriate action: Prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate; or the Luftfartsverket (LFV) (or its delegated agent). For a repair method to be approved by the Manager, International Branch, ANM-116, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) Except as provided by paragraph (b) of this AD, the actions shall be done in accordance with Saab Service Bulletin 340-92-027, dated December 10, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Saab Aircraft AB, SAAB Aircraft Product Support, S-581.88, Linköping, Sweden. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 4: The subject of this AD is addressed in Swedish airworthiness directive 1-149, dated December 10, 1999.

(f) This amendment becomes effective July 24, 2000.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on June 9, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-16 BOEING: Amendment 39-11794. Docket 2000-NM-78-AD. Supersedes AD 99-05-06, Amendment 39-11054.

Applicability: Model 747 series airplanes; as listed in Groups 1, 2, and 5 of Boeing Alert Service Bulletin 747-54A2184, Revision 1, dated May 6, 1999; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking and loose or missing fasteners in the aft torque bulkheads of the outboard nacelle struts, which could result in failure of an outboard nacelle strut diagonal brace load path and possible separation of the nacelle from the wing, accomplish the following:

RESTATEMENT OF REQUIREMENTS OF AD 99-05-06:

Repetitive Detailed Visual Inspections and Repair: Groups 1 and 2

(a) For airplanes identified as Groups 1 and 2 airplanes in Boeing Alert Service Bulletin 747-54A2184, dated July 3, 1997: Prior to the accumulation of 8,000 total flight cycles, or within 8,000 flight cycles since modification in accordance with AD 95-13-05, amendment 39-9285, or within 30 days after March 18, 1999 (the effective date of AD 99-05-06, amendment 39-11054), whichever occurs latest, perform a detailed visual inspection of the aft torque bulkheads of the number 1 and number 4 nacelle struts to detect fatigue cracking and loose or missing fasteners. The inspection shall be accomplished in accordance with Part I of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-54A2184, dated July 3, 1997, or Revision 1, dated May 6, 1999.

Note 2: There is a typographical error on Sheet 3 of Figure 1 of Boeing Alert Service Bulletin 747-54A2184, dated July 3, 1997. The words “Group 1 airplanes” should read “Groups 1 and 2 airplanes.”

(1) If no cracking, and no loose or missing fastener, is found, repeat the inspection thereafter at the intervals specified in Figure 1 of the alert service bulletin.

(2) If any cracking, or any loose or missing fastener, is found, prior to further flight, repair in accordance with Part III of the alert service bulletin. Repeat the inspection thereafter at the intervals specified in Figure 1 of the alert service bulletin. Where the service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company designated engineering representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager’s approval letter must specifically reference this AD.

Repetitive NDT Inspections and Repair: Groups 1 and 2

(b) For airplanes identified as Groups 1 and 2 airplanes in Boeing Alert Service Bulletin 747-54A2184, dated July 3, 1997: Prior to the accumulation of 8,000 total flight cycles, or within 8,000 flight cycles since modification in accordance with AD 95-13-05, amendment 39-9285, or within 30 days after March 18, 1999, whichever occurs latest, perform a non-destructive test (NDT) inspection of the aft torque bulkheads of the number 1 and number 4 nacelle struts to detect fatigue cracking. The NDT inspection shall be accomplished in accordance with Part II of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-54A2184, dated July 3, 1997, or Revision 1, dated May 6, 1999.

Note 3: The alert service bulletin refers to a variety of NDT inspections, consisting of ultrasonic inspections, surface eddy current inspections, and open-hole eddy current inspections. The logic diagram in Figure 1 of the alert service bulletin states the conditions under which each of these inspections is to be performed.

(1) If no cracking is found, repeat the inspection thereafter at the intervals specified in Figure 1 of the alert service bulletin.

(2) If any cracking is found, prior to further flight, repair in accordance with Part III of the alert service bulletin. Repeat the inspection thereafter at the intervals specified in Figure 1 of the alert service bulletin. Where the alert service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions, repair in accordance with a method approved by the Manager, Seattle ACO; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

NEW REQUIREMENTS OF THIS AD:

Note 4: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Repetitive Detailed Visual Inspections and Repair: Group 5

(c) For airplanes identified as Group 5 of Boeing Alert Service Bulletin 747-54A2184, Revision 1, dated May 6, 1999: Prior to the accumulation of 8,000 total flight cycles, or within 90 days after the effective date of this AD, whichever occurs later, perform a detailed visual inspection of the aft torque bulkheads of the number 1 and number 4 nacelle struts to detect fatigue cracking and loose or missing fasteners. The inspection shall be accomplished in accordance with Part I of the Accomplishment Instructions of the alert service bulletin.

(1) If no cracking, and no loose or missing fastener, is found, repeat the inspection thereafter at the intervals specified in Figure 1 of the alert service bulletin.

(2) If any cracking, or any loose or missing fastener, is found, prior to further flight, repair in accordance with Part III of the alert service bulletin. Repeat the inspection thereafter at the intervals specified in Figure 1 of the alert service bulletin. Where the service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions, repair in accordance with a method approved by the Manager, Seattle ACO, FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

Repetitive NDT Inspections and Repair: Group 5

(d) For airplanes identified as Group 5 airplanes in Boeing Alert Service Bulletin 747-54A2184, Revision 1, dated May 6, 1999: Prior to the accumulation of 8,000 total flight cycles, or within 90 days after the effective date of this AD, whichever occurs later, perform an NDT inspection of the aft torque bulkheads of the number 1 and number 4 nacelle struts to detect fatigue cracking. The NDT inspection shall be accomplished in accordance with Part II of the Accomplishment Instructions of the alert service bulletin.

Note 5: The alert service bulletin refers to a variety of NDT inspections, consisting of ultrasonic inspections, surface eddy current inspections, and open-hole eddy current inspections. The logic diagram in Figure 1 of the alert service bulletin states the conditions under which each of these inspections is to be performed.

(1) If no cracking is found, repeat the inspection thereafter at the intervals specified in Figure 1 of the alert service bulletin.

(2) If any cracking is found, prior to further flight, repair in accordance with Part III of the alert service bulletin. Repeat the inspection thereafter at the intervals specified in Figure 1 of the alert service bulletin. Where the alert service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions, repair in accordance with a method approved by the Manager, Seattle ACO; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

Terminating Action: Groups 1, 2, and 5

(e) For airplanes identified as Group 1, 2, and 5 airplanes in Boeing Alert Service Bulletin 747-54A2184, Revision 1, dated May 6, 1999:

At the time specified in paragraph (e)(1), (e)(2), or (e)(3), as applicable, accomplish the terminating action (installation of doublers and fillers on the forward side of the lower spar fitting) in accordance with the alert service bulletin. Accomplishment of this paragraph constitutes terminating action for the repetitive inspections required by this AD.

Note 6: There is an error in Item 3.A.5.c. under "Part 4 – Terminating Action" in the Accomplishment Instructions of Boeing Alert Service Bulletin 747-54A2184, Revision 1. The words, "as shown by Figure 11," should read "as shown by Figure 12."

(1) For airplanes in Groups 1, 2, and 5 on which the interim repair described in Part 3 of the Accomplishment Instructions of the alert service bulletin has NOT been accomplished; and Groups 1 and 2 airplanes on which the requirements of AD 95-13-05, amendment 39-9285, have NOT been accomplished: Accomplish the terminating action prior to the accumulation of 8,000 total flight cycles or within 5 years after the effective date of this AD, whichever occurs later.

(2) For airplanes in Groups 1, 2, and 5 on which the interim repair described in Part 3 of the Accomplishment Instructions of the alert service bulletin HAS been accomplished: Accomplish the terminating action within 3,000 flight cycles after accomplishment of the interim repair, or within 18 months after the effective date of this AD, whichever occurs later.

(3) For airplanes in Groups 1 and 2 on which the requirements of AD 95-13-05, amendment 39-9285, HAVE been accomplished: Accomplish the terminating action within 8,000 flight cycles after accomplishment of the requirements of AD 95-13-05, amendment 39-9285, or within 5 years after the effective date of this AD, whichever occurs later.

Alternative Methods of Compliance

(f) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 99-05-06, amendment 39-11054, are approved as alternative methods of compliance with this AD.

Note 7: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(h) Except as provided in paragraphs (a)(2), (b)(2), (c)(2), and (d)(2) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 747-54A2184, dated July 3, 1997, or Boeing Alert Service Bulletin 747-54A2184, Revision 1, dated May 6, 1999.

(1) The incorporation by reference of Boeing Alert Service Bulletin 747-54A2184, Revision 1, dated May 6, 1999, is approved by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Alert Service Bulletin 747-54A2184, dated July 3, 1997, was approved previously by the Director of the Federal Register as of March 18, 1999 (64 FR 10205, March 3, 1999).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(i) This amendment becomes effective on July 5, 2000.

FOR FURTHER INFORMATION CONTACT: Tamara L. Anderson, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2771; fax (425) 227-1181.

Issued in Renton, Washington, on June 9, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-17 BOEING: Amendment 39-11795. Docket 99-NM-182-AD.

Applicability: Model 767 series airplanes, line numbers 1 through 663 inclusive, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect fatigue cracks in the pitch load fittings of the wing front spar, which could result in reduced structural integrity of the strut, accomplish the following:

(a) Accomplish the requirements of either paragraph (b) or (c) of this AD at the later of the times specified in paragraphs (a)(1) and (a)(2) of this AD.

(1) Prior to the initial inspection threshold specified in Figure 1, Table 1.1 of Boeing Service Bulletin 767-57-0053, Revision 2, dated September 23, 1999.

(2) Within 3,000 flight cycles or 18 months after the effective date of this AD, whichever occurs first.

NOTE 2: Inspections and repairs accomplished prior to the effective date of this AD in accordance with Boeing Service Bulletin 767-57-0053, dated June 27, 1996; or Revision 1, dated October 31, 1996; are considered acceptable for compliance with the applicable action specified in this amendment.

Option 1: Ultrasonic and Eddy Current Inspections

(b) Perform ultrasonic and eddy current inspections to detect cracks of the pitch load fittings of the wing front spar, in accordance with Boeing Service Bulletin 767-57-0053, Revision 2, dated September 23, 1999.

(1) If no crack is detected, repeat the inspections thereafter at the interval specified in Table 1.2 of Figure 1 of the service bulletin.

(2) If any crack is detected, prior to further flight, remove the upper link and the pitch load fitting bushings, and accomplish both paragraphs (b)(2)(i) and (b)(2)(ii) of this AD.

(i) Perform a detailed visual inspection of the inner and outer face pad-up areas of the pitch load fittings to detect damage or corrosion and to determine if the pad-up areas are parallel, in accordance with the service bulletin. Except as provided by paragraph (f) of this AD, if any damage, corrosion, or non-parallelism is detected, prior to further flight, rework the inner or outer face of the pitch load fitting where damage or corrosion was detected, and make pad-up areas parallel, as applicable, in accordance with the service bulletin.

(ii) Accomplish paragraph (d) of this AD.

NOTE 3: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Option 2: High Frequency Eddy Current and Detailed Visual Inspections

(c) Remove the upper link and accomplish the requirements of paragraphs (c)(1) and (c)(2) of this AD, in accordance with Boeing Service Bulletin 767-57-0053, Revision 2, dated September 23, 1999.

(1) Perform a high frequency eddy current inspection or a dye penetrant inspection to detect cracking of the pitch load fittings of the wing front spar.

(2) Perform a detailed visual inspection of the inner and outer face pad-up areas of the pitch load fittings to detect damage or corrosion and to determine if the pad-up areas are parallel. Except as provided by paragraph (f) of this AD, if any damage, corrosion, or non-parallelism is detected, prior to further flight, rework the inner or outer face of the pitch load fitting where damage or corrosion was detected, and make pad-up areas parallel, as applicable, in accordance with the service bulletin.

Rework

(d) For airplanes on which any cracking is detected during any inspection required by paragraph (b) of this AD, or on which the requirements of paragraph (c) of this AD have been accomplished: Prior to further flight, accomplish paragraph (d)(1) or (d)(2) of this AD, as applicable, in accordance with Boeing Service Bulletin 767-57-0053, Revision 2, dated September 23, 1999; and accomplish paragraph (e) of this AD.

(1) For airplanes inspected in accordance with paragraph (c) of this AD and on which no cracking was detected: Make an insurance cut of the pitch load fitting lug.

(2) For airplanes on which any cracking was detected during any inspection required by paragraph (b) or (c) of this AD: Except as provided by paragraph (f) of this AD, rework the lugs of the pitch load fittings of the wing front spar.

Bushing Installation

(e) For airplanes on which the requirements specified in paragraph (d) of this AD have been accomplished: Prior to further flight, install new bushings in the pitch load fittings of the wing front spar as specified in paragraph (e)(1) or (e)(2) of this AD, in accordance with Boeing Service Bulletin 767-57-0053, Revision 2, dated September 23, 1999.

(1) Option 1: Install new bushings using the high interference fit method, and repeat the inspections required by paragraph (b) or (c) of this AD at the intervals specified in Table 1.3 of Figure 1. of the service bulletin.

(2) Option 2: Install new bushings using the FORCEMATE method, and repeat the inspections required by paragraph (b) or (c) of this AD at the interval specified in Table 1.4 of Figure 1. of the service bulletin.

Repair

(f) If any damage is detected that is outside the limits specified in Boeing Service Bulletin 767-57-0053, Revision 2, dated September 23, 1999, and the service bulletin specifies to contact Boeing for appropriate action: Prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved, as required by this paragraph, the approval letter must specifically reference this AD.

Optional Terminating Action

(g) Accomplishment of the actions specified in paragraphs (g)(1) and (g)(2) of this AD constitutes terminating action for the actions required by this AD.

(1) Modify the nacelle strut and wing structure in accordance with Boeing Service Bulletin 767-54-0080, dated October 7, 1999 (for Model 767 series airplanes powered by Pratt & Whitney engines); Boeing Service Bulletin 767-54-0081, dated July 29, 1999 (for Model 767 series airplanes powered by General Electric engines); or Boeing Service Bulletin 767-54-0082, dated October 28, 1999 (for Model 767 series airplanes powered by Rolls-Royce engines); as applicable.

(2) Accomplish the lug bore inspections and insurance cut of the pitch load fitting in accordance with Boeing Service Bulletin 767-57-0053, Revision 2, dated September 23, 1999.

NOTE 4: The FAA is considering separate rulemaking actions to mandate accomplishment of Boeing Service Bulletins 767-54-0080, 767-54-0081, and 767-54-0082. Actions described in Boeing Service Bulletin 767-57-0053, Revision 2 (or previous issues of that service bulletin), as required by this AD will be specified as an integral part of the actions required to accomplish these service bulletins.

Alternative Methods of Compliance

(h) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(j) Except as provided in paragraphs (f) and (g)(1) of this AD, the actions shall be done in accordance with Boeing Service Bulletin 767-57-0053, Revision 2, dated September 23, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington, 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(k) This amendment becomes effective on July 24, 2000.

FOR FURTHER INFORMATION CONTACT:

James G. Rehrl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2783; fax (425) 227-1181.

Issued in Renton, Washington, on June 9, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

ROLLS ROYCE
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-18 Rolls Royce Ltd.: Amendment 39-11796, Docket No. 99-NE-50-AD.

Applicability

This AD is applicable to Rolls-Royce Ltd. (R-R) Dart 511, 511-7E, 514-7, 528, 528-7E, 529-7E, 532-7, 532-7L, 532-7N, 532-7P, 532-7R, 535-7R, 551-7R, and 552-7R turboprop engines. These engines are installed on but not limited to Fokker Aircraft B.V. F27 series and Maryland Air Industries (formerly Fairchild) F-27 and FH-227 series airplanes.

Note 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance

Compliance with this AD is required as indicated below, unless already completed.

To prevent a propeller from overspeeding, resulting in propeller release after a failure of the annulus gear, which could result in damage to an adjacent engine or to the airplane, do the following:

Installation of a Sensor Probe and Retaining Ring

(a) At the next shop visit after the effective date of this AD, or by December 31, 2000, whichever occurs first, do all of the following:

(1) Install a feathering probe in the front bearing panel of the reduction gearbox in accordance with paragraph 2.A. of service bulletin (SB) Da72-348, revision 13, dated April 13, 1999.

(2) Install a steel retaining ring between the nose casing and the front bearing panel in accordance with paragraph 2.C. of SB Da72-348, revision 13, dated April 13, 1999.

(3) Replace the existing transfer bobbin with an aluminum bobbin in accordance with paragraph 2.C. of SB Da72-348, revision 13, dated April 13, 1999.

Definition of a Shop Visit

(b) For the purposes of this AD, a shop visit is defined as any maintenance action that results in the removal or disassembly of the reduction gearbox.

Alternative Method of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with §§21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

Documents Incorporated by Reference

(e) The inspection shall be done in accordance with the following Rolls-Royce service bulletin:

Document No.	Pages	Revision	Date
Da72-348	1 – 2, 2A/2B	13	April 1999
	3	7	August 22, 1969
	4-7	Original	December 24, 1968
	(The original service bulletin omitted page 8.)		
	9	11	July 10, 1970
	9A	11	July 10, 1970
	10 – 12	11	July 10, 1970
	12A – 12B	11	July 10, 1970
	13	11	July 10, 1970
	14 – 16	Original	December 24, 1968
	17	4	May 16, 1969
	18 – 19	Original	December 24, 1968
	20 – 20A	10	January 23, 1970
	21	6	July 11, 1969
	22	Original	December 24, 1968
	23	11	July 10, 1970
	24	Original	December 24, 1968
	25 – 26	13	April 1999
Supplement	1-2	Original	February 7, 1969
Total pages: 32			

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Rolls-Royce Limited, Attn: Dart Engine Service Manager, East Kilbride, Glasgow G74 4PY, Scotland; telephone: 011-44-1355-220-200, fax: 011-44-1141-778-432. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

Effective Date of this AD

(f) This amendment becomes effective July 31, 2000.

FOR FURTHER INFORMATION CONTACT: Jason Yang, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone 781-238-7747, fax 781-238-7199.

Issued in Burlington, Massachusetts, on June 9, 2000.
David A. Downey, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service

BW 2000-13

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-19 BOEING: Amendment 39-11797. Docket 99-NM-330-AD.

Applicability: Model 747 series airplanes, as listed in Boeing Alert Service Bulletin 747-53A2425, dated October 29, 1998; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (g) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracking in the aft pressure bulkhead, which could result in rapid decompression of the fuselage or overpressurization of the tail section, accomplish the following:

Initial and Repetitive Inspections

(a) Except as provided by paragraph (f) of this AD, prior to the accumulation of 20,000 total flight cycles, or within 12 months after the effective date of this AD, whichever occurs later, perform a detailed visual inspection of the upper half of the aft pressure bulkhead to detect cracking, in accordance with Figure 6 or 7, as applicable, of Boeing Alert Service Bulletin 747-53A2425, dated October 29, 1998. Repeat the detailed visual inspection thereafter at intervals not to exceed 1,500 flight cycles. For areas of the upper half of the aft pressure bulkhead that have been repaired previously, this detailed visual inspection may be deferred for up to 15,000 flight cycles after accomplishment of the repair, as described in the NOTE in paragraph 3.D. of the Accomplishment Instructions of the alert service bulletin.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(b) Except as provided by paragraph (f) of this AD, if no cracking is detected during the initial detailed visual inspection required by paragraph (a) of this AD: Within 1,500 flight cycles after accomplishment of that inspection, perform a high frequency eddy current (HFEC) inspection of the upper and lower halves of the aft pressure bulkhead to detect cracking, in accordance with Figure 8 of Boeing Alert Service Bulletin 747-53A2425, dated October 29, 1998. Repeat the HFEC inspection thereafter at intervals not to exceed 3,000 flight cycles.

(c) Except as provided by paragraph (f) of this AD, if any cracking is detected during any inspection required by paragraph (a) of this AD: Prior to further flight, perform an HFEC inspection of the upper and lower halves of the aft pressure bulkhead to detect cracking, in accordance with Figure 8 or 9, as applicable, of Boeing Alert Service Bulletin 747-53A2425, dated October 29, 1998. Repeat the HFEC inspection thereafter at intervals not to exceed 3,000 flight cycles.

Repair

(d) Except as provided by paragraphs (e) and (f) of this AD, if any cracking is detected during any inspection required by paragraph (a), (b), or (c) of this AD: Prior to further flight, repair in accordance with Boeing Alert Service Bulletin 747-53A2425, dated October 29, 1998.

(e) If any cracking is detected during any inspection required by paragraph (a), (b), or (c) of this AD, and Boeing Alert Service Bulletin 747-53A2425, dated October 29, 1998, specifies to contact Boeing for repair instructions: Repair any cracking, prior to further flight, in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

Operator's "Equivalent Procedure"

(f) Where Boeing Alert Service Bulletin 747-53A2425, dated October 29, 1998, specifies that an inspection or a repair, as applicable, may be accomplished in accordance with an operator's "equivalent procedure": The inspection or repair, as applicable, must be accomplished in accordance with the applicable chapter of the Boeing 747 Maintenance Manual or the Boeing 747 Structural Repair Manual specified in the alert service bulletin.

Alternative Methods of Compliance

(g) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(h) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(i) Except as provided by paragraphs (e) and (f) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 747-53A2425, dated October 29, 1998. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(j) This amendment becomes effective on July 28, 2000.

FOR FURTHER INFORMATION CONTACT:

Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1153; fax (425) 227-1181.

Issued in Renton, Washington, on June 12, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-20 AIRBUS INDUSTRIE: Amendment 39-11798. Docket 2000-NM-77-AD.

Applicability: Model A310 series airplanes, certificated in any category, except those airplanes on which Airbus Modification 10855 or Airbus Service Bulletin A310-27-2075 has been accomplished.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fracture of the lead screw of the position 1 flap screw jack, which could result in failure of the tie bar and possible disconnection of the flap structure from the airplane, accomplish the following:

Modification

(a) Within 18 months after the effective date of this AD, modify the position 1 flap screw jack in accordance with Airbus Service Bulletin A310-27-2075, Revision 02, dated February 8, 2000.

NOTE 2: Modifications accomplished prior to the effective date of this AD, in accordance with Airbus Service Bulletin A310-27-2075, dated November 18, 1994, or Revision 01, dated July 20, 1995, are considered acceptable for compliance with the modification specified by this AD.

NOTE 3: The Airbus service bulletin references Lucas/Liebherr Service Bulletin 537-27-M537-15, dated May 12, 1994, as an additional source of service information for accomplishing the applicable action required by this AD.

Spares

(b) As of the effective date of this AD, no person shall install on any airplane a position 1 flap screw jack having part number 537G0000-02, unless modified in accordance with this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The modification shall be done in accordance with Airbus Service Bulletin A310-27-2075, Revision 02, dated February 8, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washingtonor at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 5: The subject of this AD is addressed in French airworthiness directive 1999-510-299(B), dated December 29, 1999.

(f) This amendment becomes effective on July 28, 2000.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on June 12, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-12-21 BOEING: Amendment 39-11799. Docket 99-NM-66-AD.

Applicability: Model 747-400 series airplanes equipped with Pratt & Whitney PW4000 series engines; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent inadvertent deployment of a thrust reverser during flight and consequent reduced controllability of the airplane, accomplish the following:

Modifications

(a) For airplanes identified in Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998: Accomplish the requirements of paragraphs (a)(1) and (a)(2) of this AD at the times specified in those paragraphs. Accomplishment of these actions constitutes terminating action for the inspections and tests required by paragraph (a) of AD 94-15-05, amendment 39-8976.

(1) Within 36 months after the effective date of this AD: Install an additional locking system on each engine thrust reverser in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998.

Note 2: Installations accomplished prior to the effective date of this AD in accordance with Boeing Service Bulletin 747-78-2155, Revision 1, dated January 30, 1997, are considered acceptable for compliance with paragraph (a)(1) of this AD.

(2) Prior to or concurrent with the installation required by paragraph (a)(1) of this AD, accomplish the requirements of paragraphs (a)(2)(i), (a)(2)(ii), and (a)(2)(iii) of this AD:

(i) Modify the central maintenance computer system hardware and software in accordance with Boeing Service Bulletin 747-45-2016, Revision 1, dated May 2, 1996.

(ii) Modify the integrated display system software in accordance with Boeing Service Bulletin 747-31-2245, dated June 27, 1996.

(iii) Install the provisional wiring for the locking system on the thrust reversers in accordance with Boeing Service Bulletin 747-78-2154, Revision 3, dated December 11, 1997.

Note 3: Installations accomplished prior to the effective date of this AD in accordance with Boeing Service Bulletin747-78-2154, Revision 1, dated November 2, 1995, and Revision 2, dated October 31, 1996, are considered acceptable for compliance with paragraph (a)(2)(iii) of this AD.

Repetitive Functional Tests

(b) Within 4,000 hours time-in-service after accomplishment of paragraph (a) of this AD, or production equivalent; or within 1,000 hours time-in-service after the effective date of this AD, whichever occurs later: Perform a functional test to detect discrepancies of the additional locking system on each engine thrust reverser, in accordance with Appendix 1 of this AD. Prior to further flight, correct any discrepancy detected and repeat the functional test of that repair, in accordance with the procedures described in the Boeing 747-400 Airplane Maintenance Manual. Repeat the functional test thereafter at intervals not to exceed 4,000 hours time-in-service.

Terminating Action: Airplanes Having Line Numbers 1067 and Higher

(c) For airplanes having line numbers 1067 and higher on which the intent of Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998, was accomplished during production: Accomplishment of the repetitive functional tests required by paragraph (b) of this AD constitutes terminating action for the repetitive inspections and functional tests required by paragraph (a) of AD 94-15-05, amendment 39-8976.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (b) of this AD, the actions shall be done in accordance with Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998; Boeing Service Bulletin 747-45-2016, Revision 1, dated May 2, 1996; Boeing Service Bulletin 747-31-2245, dated June 27, 1996; or Boeing Service Bulletin 747-78-2154, Revision 3, dated December 11, 1997; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) This amendment becomes effective on July 28, 2000.

FOR FURTHER INFORMATION CONTACT:

Larry Reising, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2683; fax (425) 227-1181.

Issued in Renton, Washington, on June 14, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

EMBRAER EMPRESA BRASILEIRA
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-13-02 EMPRESA BRASILEIRA DE AERONAUTICA S.A. (EMBRAER): Amendment 39-11801. Docket 2000-NM-208-AD.

Applicability: Model EMB-135 and EMB-145 series airplanes; serial numbers 145095, 145099, 145179, 145189, 145197, 145198, 145209 through 145244 inclusive, and 145246 through 145249 inclusive; AND serial numbers 145004 through 145094 inclusive, 145096 through 145098 inclusive, 145100 through 145103 inclusive, 145105 through 145121 inclusive, 145123 through 145139 inclusive, 145141 through 145153 inclusive, 145155 through 145178 inclusive, 145180 through 145188 inclusive, 145190 through 145196 inclusive, and 145199 through 145208 inclusive, on which EMBRAER Service Bulletin No. 145-36-0017, dated March 28, 2000, has been accomplished; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent incorrect operation of the precooler differential pressure switches, which could result in inappropriate automatic shutoff of the engine bleed valve, and consequent inability to perform engine cross-bleed restarts or possible failure of the anti-ice system; and to ensure that the flight crew is advised of proper procedures to restart an engine using the auxiliary power unit; accomplish the following:

Revision to Airplane Flight Manual: Limitations Section

(a) Within 24 hours after the effective date of this AD, revise the Limitations section of the FAA-approved Airplane Flight Manual (AFM) to include the following statements. This may be accomplished by inserting a copy of this AD into the AFM. Following accomplishment of paragraph (c) of this AD, the revisions required by this paragraph may be removed from the AFM.

"THE APU MUST BE OPERATIVE FOR EVERY DEPARTURE.
SINGLE BLEED OPERATION IN ICING CONDITIONS IS PROHIBITED."

Revision to Airplane Flight Manual: Abnormal Procedures Section

(b) Within 24 hours after the effective date of this AD, replace the existing "ENGINE AIRSTART" procedure in the Abnormal Procedures section of the AFM with the following procedures. This may be accomplished by inserting a copy of this AD into the AFM.

"ENGINE AIRSTART
Affected engine:

One Electric Fuel Pump (A or B)..... ON
Ignition..... AUTO
Start/Stop Selector ..... STOP
Engine Bleed..... CLOSE
Thrust Lever..... IDLE

Airspeed and Altitude..... REFER TO AIRSTART ENVELOPE

Perform an assisted start or windmilling, as required.

CAUTION: IN ICING CONDITIONS USE CROSSBLEED START ONLY, TO AVOID LOSS OF ANTI-ICE SYSTEM PERFORMANCE.

Assisted Start:
Crossbleed Start:

N2 (operating engine) ..... ABOVE 80%
Crossbleed..... AUTO OR OPEN
Engine Bleed (operating engine)..... OPEN
Start/Stop Selector ..... START, THEN RUN
Engine Indication..... MONITOR

Check ITT and N2 rising. Observe limits. Check ignition and fuel flow indication at 10% N2.

APU bleed start:

APU..... START
APU Bleed ..... OPEN
Crossbleed..... AUTO
Engine Bleed (operating engine)..... CLOSE
Start/Stop Selector ..... START, THEN RUN
Engine Indication..... MONITOR

Check ITT and N2 rising. Observe limits. Check ignition and fuel flow indication at 10% N2.

Windmilling Start:

Airspeed..... ABOVE 260 KIAS
Minimum N2..... 12%
Start/Stop Selector ..... START, THEN RUN
ITT and N2..... MONITOR

NOTE: Windmilling start will be slower than an assisted start. Windmilling start with N2 above 30% and increasing, the loss of altitude may be minimized, by reducing airspeed. Start will be faster if ITT is below 320ºC.

After Start:

Affected Engine Bleed.....AS REQUIRED
Crossbleed.....AUTO
APU Bleed .....AS REQUIRED"

Disconnection of the Precooler Differential Pressure Switches

(c) Within 100 flight hours after the effective date of this AD, disconnect the electrical connector from the precooler differential pressure switches in the left and right engine pylons, in accordance with EMBRAER Alert Service Bulletin No. 145-36-A018, dated April 14, 2000. Following accomplishment of this paragraph, the AFM revision required by paragraph (a) of this AD may be removed from the AFM.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA, Small Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The disconnection of the precooler differential pressure switches shall be done in accordance with EMBRAER Alert Service Bulletin No. 145-36-A018, dated April 14, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

Copies may be obtained from Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343 -CEP 12.225, Sao Jose dos Campos - SP, Brazil. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Note 3: The subject of this AD is addressed in Brazilian airworthiness directive 2000-04-01R1, dated May 3, 2000.

Effective Date

(g) This amendment becomes effective on July 3, 2000.

FOR FURTHER INFORMATION CONTACT: Rob Capezzuto, Aerospace Engineer, Systems and Flight Test Branch, ACE-116A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349; telephone (770) 703-6071; fax (770) 703-6097.

Issued in Renton, Washington, on June 20, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-13

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-13-03 MCDONNELL DOUGLAS: Amendment 39-11802. Docket 2000-NM-49-AD.

Applicability: Model DC-8 series airplanes that have been converted from a passenger to a cargo-carrying ("freighter") configuration in accordance with Supplemental Type Certificate (STC) SA1063SO; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent opening of the cargo door while the airplane is in flight, and consequent rapid decompression of the airplane including possible loss of flight control or severe structural damage, accomplish the following:

Actions Addressing the Main Deck Cargo Door

(a) Within 60 days after the effective date of this AD, accomplish a general visual inspection of the wire bundle of the main deck cargo door between the exit point of the cargo liner and the attachment point on the main deck cargo door to detect crimped, frayed, or chafed wires; and perform a general visual inspection for damaged, loose, or missing hardware mounting components. If any crimped, frayed, or chafed wire, or damaged, loose, or missing hardware mounting component is detected, prior to further flight, repair in accordance with FAA-approved maintenance procedures.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(b) Within 60 days after the effective date of this AD, revise the Limitations Section of the appropriate FAA-approved Airplane Flight Manual Supplement (AFMS) for STC SA1063SO by inserting therein procedures to ensure that the main deck cargo door is fully closed, latched, and locked prior to dispatch of the airplane, and install any associated placards. The AFMS revision procedures and installation of any associated placards shall be accomplished in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Actions Addressing the Main Deck Cargo Door Systems

(c) Within 18 months after the effective date of this AD, accomplish the actions specified in paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD in accordance with a method approved by the Manager, Los Angeles ACO.

(1) Modify the indication system of the main deck cargo door to indicate to the pilots whether the main deck cargo door is fully closed, latched, and locked;

(2) Modify the mechanical and hydraulic systems of the main deck cargo door to eliminate detrimental deformation of elements of the door latching and locking mechanism;

(3) Install a means to visually inspect the locking mechanism of the main deck cargo door;

(4) Install a means to remove power to the door while the airplane is in flight;

(5) Install a means to prevent pressurization to an unsafe level if the main deck cargo door is not fully closed, latched, and locked.

(d) Compliance with paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD constitutes terminating action for the requirements of paragraphs (a) and (b) of this AD, and the AFMS revision and placards may be removed.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permit

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date

(g) This amendment becomes effective on August 1, 2000.

FOR FURTHER INFORMATION CONTACT:

Michael E. O'Neil, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5320; fax (562) 627-5210.

Issued in Renton, Washington, on June 21, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

APPENDIX 1

Excerpt from an FAA Memorandum to Director-Airworthiness and Technical Standards of ATA, dated March 20, 1992

"(1) Indication System:

(a) The indication system must monitor the closed, latched, and locked positions, directly.

(b) The indicator should be amber unless it concerns an outward opening door whose opening during takeoff could present an immediate hazard to the airplane. In that case the indicator must be red and located in plain view in front of the pilots. An aural warning is also advisable. A display on the master caution/warning system is also acceptable as an indicator. For the purpose of complying with this paragraph, an immediate hazard is defined as significant reduction in controllability, structural damage, or impact with other structures, engines, or controls.

(c) Loss of indication or a false indication of a closed, latched, and locked condition must be improbable.

(d) A warning indication must be provided at the door operators station that monitors the door latched and locked conditions directly, unless the operator has a visual indication that the door is fully closed and locked. For example, a vent door that monitors the door locks and can be seen from the operators station would meet this requirement.

(2) Means to Visually Inspect the Locking Mechanism:

There must be a visual means of directly inspecting the locks. Where all locks are tied to a common lock shaft, a means of inspecting the locks at each end may be sufficient to meet this requirement provided no failure condition in the lock shaft would go undetected when viewing the end locks. Viewing latches may be used as an alternate to viewing locks on some installations where there are other compensating features.

(3) Means to Prevent Pressurization:

All doors must have provisions to prevent initiation of pressurization of the airplane to an unsafe level, if the door is not fully closed, latched and locked.

(4) Lock Strength:

Locks must be designed to withstand the maximum output power of the actuators and maximum expected manual operating forces treated as a limit load. Under these conditions, the door must remain closed, latched and locked.

(5) Power Availability:

All power to the door must be removed in flight and it must not be possible for the flight crew to restore power to the door while in flight.

(6) Powered Lock Systems:

For doors that have powered lock systems, it must be shown by safety analysis that inadvertent opening of the door after it is fully closed, latched and locked, is extremely improbable."

BW 2000-13

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Note: The superseded AD (99-25-13 C1) is published in the AD Summary without the C1.

2000-13-04 BOEING: Amendment 39-11803. Docket 2000-NM-108-AD. Supersedes AD 99-25-13 C1, Amendment 39-11456.

Applicability: Model 777-200 and -300 series airplanes equipped with Rolls-Royce Trent 800, General Electric GE90, or Pratt & Whitney PW4000 series turbofan engines; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prohibit dispatch of an airplane with an engine-mounted backup generator having a sheared shaft; and to detect and correct damage to the engine, which could result in inflight shutdowns; accomplish the following:

RESTATEMENT OF REQUIREMENTS OF AD 99-25-13 C1

Revisions to the Airplane Flight Manual

(a) For all airplanes: Within 14 days after December 23, 1999 (the effective date of AD 99-25-13 C1, amendment 39-11456), revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following information. This may be accomplished by inserting a copy of this AD in the AFM.

"Dispatch of the airplane with an engine-mounted backup generator having a sheared shaft is prohibited.

Following replacement of the backup generator on both the left and right engines, extended twin-engine operations (ETOPS) flight is prohibited until a non-ETOPS flight of at least one hour in duration is accomplished."

Prohibited Servicing or Replacement

(b) For all airplanes: As of 14 days after December 23, 1999, the servicing of both the left and right backup generators or replacement of both backup generators with new or serviceable components by the same individual prior to the same flight is prohibited.

One-Time Actions for Rolls-Royce Engines

(c) For airplanes equipped with Rolls-Royce Trent 800 series turbofan engines: Within 14 days after December 23, 1999, determine whether the status message "ELEC BACKUP GEN L(R)" and the maintenance message "Backup generator L(R) has a sheared shaft" have occurred within the last 250 flight hours prior to the effective date of this AD. If these messages have occurred during that time, accomplish follow-on corrective actions, as applicable, at the times specified in paragraphs C.1.(c) and D. of Rolls-Royce Service Bulletin RB.211-72-C813, Revision 1, dated July 16, 1999, in accordance with the procedures specified in the service bulletin.

NOTE 2: Boeing Service Letter 777-SL-24-023-B, dated August 16, 1999, references Rolls-Royce Service Bulletin RB.211-72-C813, Revision 1, dated July 16, 1999, as an additional source of service information to accomplish certain actions required by this AD.

Inspections and Corrective Actions: Pratt & Whitney Engines

(d) For Model 777 series airplanes equipped with Pratt & Whitney PW4000 series turbofan engines:

Within 14 days after December 23, 1999, and thereafter prior to each flight, if the status message "ELEC BACKUP GEN L(R)" is active, prior to further flight, inspect the Maintenance Access Terminal (MAT) for certain maintenance messages indicating a sheared shaft or low oil pressure, in accordance with Step 1.a. of Boeing Service Letter 777-SL-24-025, dated August 18, 1999.

(1) If any of the specified maintenance messages is active, prior to further flight, remove and replace the backup generator in accordance with Airplane Maintenance Manual (AMM) 24-25-01-000-801 or 24-25-01-400-801, as applicable.

(2) If the backup generator shaft is found to be sheared, or either of the low oil pressure messages are active, prior to further flight, accomplish the corrective actions specified in Step 1.a.(1) of Boeing Service Letter 777-SL-24-025, dated August 18, 1999, in accordance with that service letter.

Flight Test After Replacement of Backup Generators: Pratt & Whitney Engines

(e) For airplanes equipped with Pratt & Whitney PW4000 series turbofan engines: As of 14 days after December 23, 1999, following any replacement of the backup generator on both the left and right engines, accomplish paragraphs (e)(1) and (e)(2) of this AD at the times specified in those paragraphs.

(1) Prior to any ETOPS flight, conduct a non-revenue test flight of at least one hour in duration, or a non-ETOPS flight that is either a non-revenue or revenue flight of at least one hour in duration.

(2) Prior to further flight after accomplishment of the action required by paragraph (e)(1) of this AD: Verify accomplishment of the maintenance actions required by paragraphs (d), (d)(1), and (d)(2) of this AD, as applicable.

NEW REQUIREMENTS OF THIS AD

Inspections and Corrective Actions: Rolls-Royce and General Electric Engines

(f) Within 14 days after the effective date of this AD, and thereafter prior to each flight: Accomplish paragraphs (f)(1) or (f)(2) of this AD, as applicable.

(1) For airplanes equipped with Rolls-Royce Trent 800 series turbofan engines: Accomplish paragraphs (f)(1)(i) and (f)(1)(ii) of this AD.

(i) Inspect the Electrical Maintenance Page of the engine indicating and crew alerting system (EICAS), and perform follow-on corrective actions, as applicable, at the times specified in and in accordance with the procedures specified in Boeing Service Letter 777-SL-24-023-B, dated August 16, 1999.

(ii) If the status message "ELEC BACKUP GEN L(R)" is active: Prior to further flight, inspect the MAT for certain maintenance messages indicating a sheared shaft or low oil pressure, as specified in Step 2.a. of Boeing Service Letter 777-SL-24-023-B, dated August 16, 1999; and accomplish the corrective actions specified in Steps 2.a.(1) and 2.a.(2) of the service letter, as applicable, in accordance with that service letter.

(2) For airplanes equipped with General Electric GE90 series turbofan engines: If the status message "ELEC BACKUP GEN L(R)" is active, prior to further flight, inspect the MAT for certain maintenance messages indicating a sheared shaft or low oil pressure, as specified in Step 1.a. of Boeing Service Letter 777-SL-24-024, dated August 16, 1999; and accomplish the corrective actions specified in Steps 1.a.(1) and 1.a.(2) of the service letter, as applicable, in accordance with the service letter.

Flight Test After Replacement of Backup Generators: Rolls-Royce and General Electric Engines

(g) For airplanes equipped with Rolls-Royce Trent 800 and General Electric GE90 series turbofan engines: As of 14 days after the effective date of this AD, following any replacement of the backup generator on both the left and right engines, accomplish paragraphs (g)(1) and (g)(2) of this AD at the times specified in those paragraphs.

(1) Prior to any ETOPS flight, conduct a non-revenue test flight of at least one hour in duration, or a non-ETOPS flight that is either a non-revenue or revenue flight of at least one hour in duration.

(2) Prior to further flight after accomplishment of the action required by paragraph (g)(1) of this AD: Verify accomplishment of the maintenance actions required by paragraph (f)(1) or (f)(2) of this AD, as applicable.

Alternative Methods of Compliance

(h) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(j) Except as provided by paragraphs (a), (d)(1), (e)(1), (e)(2), (g)(1), and (g)(2) of this AD, the actions shall be done in accordance with Rolls-Royce Service Bulletin RB.211-72-C813, Revision 1, dated July 16, 1999; Boeing Service Letter 777-SL-24-023-B, dated August 16, 1999; Boeing Service Letter 777-SL-24-024, dated August 16, 1999; or Boeing Service Letter 777-SL-24-025, dated August 18, 1999; as applicable. This incorporation by reference was approved previously by the Director of the Federal Register as of December 23, 1999 (64 FR 68618, December 8, 1999). Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(k) This amendment becomes effective on July 13, 2000.

FOR FURTHER INFORMATION CONTACT: Ed Hormel, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2681; fax (425) 227-1181.

Issued in Renton, Washington, on June 21, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.